Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Nevada**

Print Date: **3/9/2000**

Site Summary Level: **Nevada Test Site**

HQ ID: **0223**

Project **NV202 / AIPs/Grants**

General Project Information

Project Description Narratives

Purpose, Scope, and Technical Approach:

The Agreements in Principle (AIPs)/Grants Project provides support for: regulator oversight of project; public involvement mechanisms; independent risk assessments; and university research and development projects. Activities include AIPs with Alaska, Mississippi, and Nevada; support to the state of Nevada for Federal Facility Agreement and Consent Order activities; support of the Community Advisory Board; support of the Harry Reid Center for the Nevada Risk Assessment Management Program; support for research and development projects with the University of Nevada, Las Vegas, and the University of Nevada, Reno; and support to Desert Research Institute for Nevada Environmental Research Park program activities.

Project Status in FY 2006:

Funding decreases as the result of completion of activities in Alaska and Mississippi - the remaining reduced amount for these states is to support regulator oversight of long-term surveillance and monitoring activities. Funding for the state of Nevada remains flat to cover continuation of oversight of required corrective actions under the Federal Facility Agreement and Consent Order. Support of independent risk assessment activities is assumed to end by 2006. Funding continues at a decreasing level for support of university grants.

Post-2006 Project Scope:

Support of the AIP with the state of Nevada is assumed to continue through 2014, then decrease to a reduced amount covering regulator oversight of long-term surveillance and monitoring activities. Transition of monitoring responsibilities to the landlord, Defense Programs, along with the attendant funding, is assumed to occur after 2014. Support of university grants from Environmental Management funding are assumed to cease at the end of 2010.

Project End State

Moderate funding for regulator oversight of long-term surveillance and monitoring programs to monitor underground testing areas will continue to be required.

Cost Baseline Comments:

Cost baselines for AIPs and Grants are based on historical costs, negotiated payments, fee structures, and assumptions related to completion of individual project activities within the applicable states. Projected costs are escalated according to Paths to Closure guidance. Contingency is not applied.

Safety & Health Hazards:

Hazards associated with this PBS are primarily associated with long-term surveillance and monitoring activities.

The hazards that may be encountered during oversight activities are those associated with the activities at specific sites. These hazards may include the following; industrial and construction hazards common to the environmental assessment and remediation industry and radiological contamination. Workers can be expected to encounter the normal occupational/physical hazards associated with field work; lifting, slip, trip and fall; confined spaces;

Project Description Narratives

and excavations. In addition, the hazards of working in a desert environment include biological hazards and physical agents such as venomous reptiles and insects, rodents potentially infected with the Hantavirus, wild animals, heat stress and heat related injury, cold stress, and adverse weather conditions including high winds and flash floods. Radiological hazards are those associated with the on-site contaminants and may include tritium, depleted uranium, plutonium, and other radionuclides. Chemical hazards include those associated with both the on-site contaminants and the use of operational chemicals such as gasoline, diesel, and sampling preservatives. Due to their locations, some sites may also contain hazards from unexploded ordnance. All activities are conducted to ensure compliance with guidance and direction provided by DOE and applicable OSHA requirements for hazardous waste operations. This includes the information and procedures provided in the overall Nevada Environmental Restoration Project Health and Safety Plan (HASP) and in the site-specific health and safety plans (SSHASPs) which are unique to each field project. The SSHASP is prepared, reviewed and approved by cognizant personnel prior to the commencement of hazardous waste operations and field activities. The SSHASPs contain an integrated safety management approach to the assessment of the field-work hazards and the appropriate control and mitigation procedures. Such information includes a health and safety (H&S) risk or hazard analysis for each site task and operation, identification of key project management and H&S personnel, site exposure monitoring requirements, personal protective equipment and procedures, medical surveillance requirements, and emergency response guidance. Specialized guidance on specific hazards such as confined spaces, drill-rig safety, excavations, lead, asbestos and other toxic/carcinogenic materials are provided when appropriate. The procedures and guidance outlined above are applicable throughout the life cycle of the project.

Safety & Health Work Performance:

The resources necessary to accomplish the work safely are provided through the PBS, the site Health and Safety (H&S) Program requirements, and through the resources allocated to the site`s integrated safety management system in the following areas: radiological safety, emergency management, fire safety, industrial hygiene and safety, occupational medicine, security, performance oversight, and standards management. To ensure readiness prior to the start of work, Operation Readiness Reviews, hazard assessment reviews, and radiological ALARA reviews are conducted as required. The measures used to monitor the adequacy of health and safety controls include several integrated approaches. Internal and external program management reviews and audits are conducted to assess overall effectiveness and compliance. Ongoing on-site surveillance is conducted by both project management and H&S professionals to confirm work-site controls and procedures are being followed. Occupational exposure monitoring is conducted at the work sites to verify the effectiveness of contamination controls. If unforeseen H&S hazards arise that are not already covered by contingency planning, work activities are suspended until the hazard is properly addressed by management and H&S specialists. Stop Work Orders are issued if there is an imminent hazard. Formalized change control procedures are used to manage and to document major project changes.

H&S professionals ensure that work is planned in accordance with 29 CFR 1910, 29 CFR 1926, 40 CFR, 49 CFR, and 10 CFR requirements. Resources and personnel that may be necessary include industrial hygienists, health physicists, safety professionals, waste management specialists, quality assurance programs, on-site exposure monitoring (both technicians and instruments), internal and external dosimetry programs, medical surveillance and medical emergency care programs, personal protective equipment, and engineering controls.

PBS Comments:

This project provides funding for regulatory oversight of project activities and for grants in support of research, risk management, and community involvement activities.

Baseline Validation Narrative:

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Project Description Narratives

The Nevada Environmental Restoration Project Baseline, which comprises the individual Project Summary Baselines for the DOE/NV environmental restoration program, has been formally reviewed by both the U.S. Army Corps of Engineers (USACE) and the DOE/HQ-sponsored Core Technical Group, and informally reviewed by the Inspector General`s (IG) Office. Additionally, all cost estimates supporting the overall and individual project baselines are reviewed annually by Federal cost professionals and an independent contractor providing cost estimating support to the DOE/NV Environmental Management (EM) Program. In Fiscal Year 1997, the USACE was tasked by DOE/HQ to provide an independent assessment of site baselines in support of the remediation of contamination at DOE sites around the country. Phase I of this effort for DOE/NV was conducted in December 1996. The EM Task Force, comprised of both USACE and contractor technical experts, assessed DOE/NV Environmental Restoration Project work scopes, schedules, and cost estimates. The team ce oversight, and standards management. To ensure readiness prior to the start of work, Operation Readiness Reviews, hazard assessment reviews, and radiological ALARA reviews are conducted as required. The measures used to monitor the adequacy of health and safety controls include several integrated approaches. Internal and external program management reviews and audits are conducted to assess overall effectiveness and compliance. Ongoing on-site surveillance is conducted by both project management and H&S professionals to confirm work-site controls and procedures are being followed. Occupational exposure monitoring is conducted at the work sites to verify the effectiveness of contamination controls. If unforeseen H&S hazards arise that are not already covered by contingency planning, work activities are suspended until the hazard is properly addressed by management and H&S specialists. Stop Work Orders are issued if there is an imminent hazard. Formalized change control procedures are used to manage and to document major project changes.

H&S professionals ensure that work is planned in accordance with 29 CFR 1910, 29 CFR 1926. A baseline can be easily modified to reflect more accurate project data as it becomes available. It can also be used to quickly reflect the consequences of future funding scenarios. The document reflects a high degree of stakeholder and regulator input in terms of project prioritization and presents a credible approach to project completion in accordance with 2006 Plan goals. However, the scope in the baseline is subject to numerous fiscal, regulatory, and land-use uncertainties which could impact the project completion date. Finally, the Core Technical Group concluded that these future uncertainties are well beyond the influence of the parties responsible for project execution. The Nevada Environmental Restoration Project has completed mitigation of findings and recommended corrective actions from the USACE and Core Technical Group reviews. The informal review of the baseline by the IG resulted in no findings.

General PBS Information

Project Validated?	Yes	**Date Validated:**	7/1/1997
Has Headquarters reviewed and approved project?	No		
Date Project was Added:	12/1/1997		
Baseline Submission Date:	7/8/1999		
FEDPLAN Project?	Yes		

Drivers:

CERCLA	RCRA	DNFSB	AEA	UMTRCA	State	DOE Orders	Other
N	Y	N	Y	N	Y	Y	N

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Project **NV202 / AIPs/Grants**

General PBS Information

Project Identification Information

DOE Project Manager: Patti Hall

DOE Project Manager Phone Number: 702-295-0193

DOE Project Manager Fax Number: 702-295-1113

DOE Project Manager e-mail address: hall@nv.doe.gov

Is this a High Visibility Project (Y/N):

Planning Section

Baseline Costs (in thousands of dollars)

	1997-2006 Total	2007-2070 Total	1997-2070 Total	1997	Actual 1997	1998	Actual 1998	1999	2000	2001	2002	2003	2004	2005	2006
PBS Baseline (current year dollars)	38,477	43,497	81,974	1,168	1,168	1,279	1,280	3,473	5,311	5,422	4,626	4,723	4,822	4,924	2,729
PBS Baseline (constant 1999 dollars)	35,892	22,968	58,860	1,168	1,168	1,279	1,280	3,473	5,171	5,171	4,321	4,321	4,321	4,321	2,346
PBS EM Baseline (current year dollars)	38,477	43,497	81,974	1,168	1,168	1,279	1,280	3,473	5,311	5,422	4,626	4,723	4,822	4,924	2,729
PBS EM Baseline (constant 1999 dollars)	35,892	22,968	58,860	1,168	1,168	1,279	1,280	3,473	5,171	5,171	4,321	4,321	4,321	4,321	2,346

	2007	2008	2009	2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
PBS Baseline (current year dollars)	2,519	2,572	2,626	2,681	5,092	1,480	1,639	1,819	2,020	2,241	2,486	2,759	3,058	3,396	3,768	3,341
PBS Baseline (constant 1999 dollars)	2,121	2,121	2,121	2,121	3,786	991	990	990	991	991	990	991	990	991	991	792

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	2007	2008	2009	2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
PBS EM Baseline (current year dollars)	2,519	2,572	2,626	2,681	5,092	1,480	1,639	1,819	2,020	2,241	2,486	2,759	3,058	3,396	3,768	3,341
PBS EM Baseline (constant 1999 dollars)	2,121	2,121	2,121	2,121	3,786	991	990	990	991	991	990	991	990	991	991	792

Baseline Escalation Rates

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
0.00%	0.00%	0.00%	2.70%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%

2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%

Project Reconciliation

Project Completion Date Changes:

Previously Projected End Date of Project:

Current Projected End Date of Project: 9/30/2070

Explanation of Project Completion Date Difference (if applicable):

Project Cost Estimates (in thousands of dollars)

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars):	26,712	**Actual 1997 Cost:**	1,168	**Actual 1998 Cost:**	1,280
Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars):	24,264	**Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):**			655
Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	24,919				

Project Cost Changes

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Project Reconciliation

	Cost Adjustments	Reconciliation Narratives
Cost Change Due to Scope Deletions (-):		
Cost Reductions Due to Efficiencies (-):		
Cost Associated with New Scope (+):		
Cost Growth Associated with Scope Previously Reported (+):		
Cost Reductions Due to Science & Technology Efficiencies (-):		
Subtotal:	24,919	
Additional Amount to Reconcile (+):	31,494	Addition of Harry Reid Center work scope and extension of funding for state oversight of LTSM
Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	**56,413**	

Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
Project Start			6/30/1997								
Project End			9/30/2070								

Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critial Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
Project Start				Y			2				
Project End					Y	Y					